

Amendments to the Claims

The listing of claims will replace the previous version, and the listing of claims:

Listing of Claims

1. (currently amended) An electrodeionization apparatus comprising:
 - an anolyte compartment having an anode;
 - a catholyte compartment having a cathode;
 - concentrating compartments and desalting compartments wherein the concentrating compartments and the desalting compartments are formed between the anolyte compartment and the catholyte compartment by arranging alternately at least one anion-exchange membrane and at least one cation-exchange membrane;
 - ion-exchanger with which the desalting compartments are filled;
 - at least one of ion-exchanger, activated carbon, and electric conductor which fills the concentrating compartments;
 - a device for introducing electrode water into the anolyte compartment and the catholyte compartment, respectively;
 - a concentrated water introducing device for introducing concentrated water into the concentrating compartments;
 - a device for feeding raw water into the desalting compartments to produce deionized water; and
 - outlets formed at the desalting compartments for taking out the deionized water[,];
 - wherein the outlets of the desalting compartments are connected to the concentrated water introducing device to introduce a part of the deionized water containing at least one of silica and boron at a lower concentration than the raw water and obtained from the desalting compartments into the concentrating compartments at a side near the outlets for the deionized water of the desalting compartments;

the concentrated water introducing device makes the concentrated water flow out of the concentrating compartment at a side near an inlet for the raw water of the desalting compartment; and

at least a part of the concentrated water flows out of the concentrating compartments out of a circulatory system, and;

the desalting compartments are filled with an anion exchanger and a cation exchanger in such a manner that anion exchanger/cation exchanger volume ratio becomes 8/2 to 5/5; and

at least one part of the anion exchanger in the desalting compartment is made of a II type anion exchanger.

2. (Currently amended) An electrodeionization apparatus as claimed in claim 1, wherein the concentrating compartments are filled with the ion exchanger,

wherein the ion exchanger consists of an anion exchanger and a cation exchanger, and the anion exchanger and the cation exchanger are packed in the concentrating compartments in such a manner that the anion exchanger/cation exchanger volume ratio becomes 8/2 to 5/5.

3. (canceled)

4. (currently amended) An electrodeionization apparatus as claimed in claim 3 1, wherein 5 to 15% by volume of the anion exchanger consists of the II type anion exchanger.

5. (previously presented) An electrodeionization apparatus as claimed in claim 1, wherein the ratio of the anion exchanger becomes higher in a nearer position to the inlet for raw water in the desalting compartments.

6. (previously presented) An electrodeionization apparatus as claimed in claim 1, wherein the ion exchanger is a salt type ion exchanger before the electrodeionization apparatus starts to run and is filled in each compartment in such a manner that volume of the salt type ion exchanger occupies 95 to 100% of each compartment.

7. (previously presented) An electrodeionization apparatus as claimed in claim 1, wherein

end plates are disposed on outermost both end sides out of the cathode or from the cathode to the anode respectively,

the end plates are tied together with tie-rods at the peripheries thereof, and

reinforcing members are disposed along at least one lateral side of the electrodeionization apparatus.